

# Quantum Fisher information and Curvature of Entanglement

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**Abstract:** Quantum Fisher Information (QFI) is a key concept in quantum metrology and provides a fundamental limit to the precision with which a parameter can be estimated. In this recent work, we investigate the relationship of quantum Fisher information (QFI) with the curvature of entanglement (COE) with respect to a parameter being measured in two foundational models of quantum optics, namely, the Jaynes-Cummings model and the Tavis-Cummings model, and possible extension to a general two qubit framework.

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**Biography:** Anjala Babu joined department of physics, SIU in the fall of 2019 for her Masters degree. After graduating in 2021 she started her Ph.D. with Dr. Mark Byrd working in Quantum information science, particularly focusing on quantum error correction and quantum sensing.